REMARKS

In response to the above Office Action, claim 2 essentially has been rewritten in independent form, claims 1, 4-7, and 20-23 cancelled and claims 8, 12-15, 18, 19, 24, and 25 amended to depend from just claim 2.

In rewriting claim 2 in independent form it was rewritten as a true composition claim by deleting reference to the starting alpha-olefin and zinc alkyl compound used to form the alkyl zinc complex, which is now defined as a "plurality of zinc alkyl compounds" to distinguish them from the group 3-10 transition metal complex or the lanthanide or actinide complex in the composition. A "plurality" of alkyl zinc "compounds" is a more accurate way to describe this material of the composition, because it is a mixture of zinc alkyl compounds having a distribution of different alkyl chain lengths.

With respect to the Examiner's objection to the expression "alkyl groups" in claim 23, this has now been more specifically defined in amended claim 2 as the "alkyl groups of the plurality of zinc alkyl compounds" to make it clear it is the alkyl groups of these compounds.

As set forth in process claim 3, the composition of claim 2 is prepared by contacting an alpha-olefin and a zinc alkyl compound with a chain growth catalyst system of one of the defined complexes and optionally an activator to form a zinc alkyl chain growth product. This product which is the composition claimed in claim 2 is a plurality of zinc alkyl compounds in which the alkyl groups thereof have grown in length due to the insertion of the olefin in the original zinc alkyl starting material and are thus necessarily longer chains than those present in the starting material. Preferably, the

amount of zinc alkyl starting material employed is at least 100 times the amount of the complex employed in the chain growth catalyst system.

The number of moles of zinc alkyl compound employed as the starting material is substantially the same as the number of moles of zinc alkyl chain growth material present in the product. This is because the number of moles is dependent on the number of atoms of zinc. Thus the mole ratio of zinc alkyl (whether starting material or chain growth product) to complex remains the same before, during and at completion of the reaction. Accordingly, as set forth in claim 2, the mole ratio of the complex to the plurality of zinc alkyl compounds in the composition is also at least 1:100 and, more specifically, in a range of from about 1:10,000,000 to 1:100.

This mole ratio is quite different from that in the cited Langer reference which relates to a method for making oligomers of ethylene using a catalyst which is a combination of zirconium tetrachloride and a dialkyl zinc compound R_2Zn. There the quantity of R_2Zn employed is never more than equimolar with the $ZrCl_4$ (see column 3, lines 11 to 13, and Claim 1 of the reference).

In contrast, in the present invention the amount of Zn alkyl starting material employed initially and in the final composition is at least 100 times the amount of transition metal complex. See page 14, lines 11 to 13 of the specification. This means that the zinc alkyl is a substantial part of the reaction ingredients (compared to the catalytic quantity of complex employed) and dominates the nature of the final product. In Langer the zinc alkyl is more in the nature of a catalyst rather than a participating major reagent.

It is believed claim 2 and claims 8-19, 24, and 25 dependent therefrom are also now allowable together with the allowed process claims 3 and 26-64. The preferred order of claims is 2, 8-19, 24, 25, 3, and 26-64.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: September 19, 2005

By: _____
Arthur S. Garrett
Reg. No. 20,338

969426_1.DOC